

<b>FORM PTO-1449</b>  <b>INFORMATION DISCLOSURE CITATION</b>		Attorney Docket: 4208-4158 (Nokia28890)		Serial No.: to be assigned	
		Applicant(s): Arto Palin et al.		Examiner: to be assigned	
		Filing Date: October 29, 2003		Group Art Unit: to be assigned	

U.S. PATENT DOCUMENTS							
Examiner Initial	Patent Number	Publication Date	Name	Class	Sub-Class	Filing Date	
EA	AA	5,307,370	4/26/1994	Eness			
EB	AB	6,172,673	1/9/2001	Lehtinen et al.			
EB	AC	6,507,734	1/14/2003	Berger et al.			
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						

FOREIGN PATENT DOCUMENTS							
Examiner Initial	Patent Number	Publication Date	Country	Class	Sub-Class	Translation	
EA	AJ	WO 01/45319	06/21/2001	PCT	H04L	9/08 <input type="checkbox"/> Yes <input type="checkbox"/> No	
EB	AK	WO 99/41876	08/19/1999	PCT	H04L	9/08 <input type="checkbox"/> Yes <input type="checkbox"/> No	
	AL					<input type="checkbox"/> Yes <input type="checkbox"/> No	
	AM					<input type="checkbox"/> Yes <input type="checkbox"/> No	
	AN					<input type="checkbox"/> Yes <input type="checkbox"/> No	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, etc.)		
	AO	
	AP	
	AS	

Examiner: <u>Esaw A</u>	Date Considered: <u>05/08/06</u>
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609.  
 Draw line through citation if not in conformance and not considered.  
 Include copy of this form with next communication to Applicant.

**RELATED CASE  
SUBMISSION**Attorney Docket:  
4208-4158Serial No.:  
10/694,881Applicant:  
Arto PALIN, et al.Filing Date:  
October 29, 2003Group Art Unit:  
2131**RELATED PENDING APPLICATIONS**

Examiner Initial		Serial No.	Filing Date	Inventor(s)	Publication No. or Patent No. (if applicable)	Publication Date or Issue Date (if applicable)
EA	1	10/660,544	9/12/2003	Palin, et al.	2005-0059345-A1	3/17/05
EW	2	10/660,545	9/12/03	Palin, et al.	2005-0058116 A1	3/17/05
EW	3	10/660,549	9/12/03	Salokannel, et al.	2005-0058107-A1	3/17/05
EW	4	10/660,634	9/12/03	Salokannel, et al.	2005-0058152-A1	3/17/05
EW	5	10/870,060	6/18/04	Kossi, et al.		
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Examiner	EAW Abraham		Date Considered 05/06/06			

<b>FORM PTO-1449</b>		Attorney Docket: 4208-4158		Serial No.: 10/694,881	
<b>INFORMATION DISCLOSURE CITATION</b>		Applicant: Arto PALIN, et al.			
		Filing Date: October 29, 2003		Group Art Unit: 2131	

MAR 29 2005  
 U.S. PATENT & TRADEMARK OFFICE

U.S. PATENT DOCUMENTS							
Examiner Initial	Patent Number	Publication Date	Name	Class	Sub-Class	Filing Date	
<i>ES</i>	AA 2002/0065099	5/30/02	Bjorndahl				
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS							
Examiner Initial	Patent Number	Publication Date	Country	Class	Sub-Class	Translation	
<i>ES</i>	AL 1274194 A1	1/8/03	EP	H04L	9/08	translated all	
<i>ES</i>	AM 10140446 A1	3/6/03	DE	H04L	009/00	Abstract	
<i>ES</i>	AN WO 99/38302	7/29/99	PCT	H04L	29/06	translated all	
	AO						
	AP						

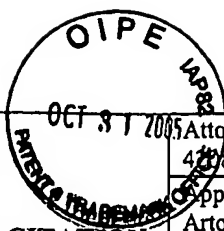
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, etc.)		
	AR	
	AS	
	AT	

Examiner <i>ESaw Asrahan</i>	Date Considered <i>05/08/06</i>
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 Include copy of this form with next communication to Applicant.

FORM PTO-1449A

## INFORMATION DISCLOSURE CITATION



Attorney Docket:

4228-4158

Serial No.:

10/694,881

Applicant:

Arto PALIN, et al.

Filing Date:

October 29 2003

Group Art Unit:

2131

## U.S. PATENT / PUBLICATION DOCUMENTS

Examiner Initial		Patent/Publication Number	Publication/Issue Date	Name	Filing Date
<i>EW</i>	1.	2004/0066762 A1	4/2004	Alastalo	
	2.				
	3.				
	4.				
	5.				
	6.				
	7.				
	8.				
	9.				
	10.				
	11.				
	12.				
	13.				
	14.				

## FOREIGN PATENT DOCUMENTS

Examiner Initial		Patent Number	Publication Date	Country	Copy Filed	Translation
<i>EW</i>	15.	WO 03/084146 A1	10/2003	WIPO	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>EW</i>	16.	WO 02/21746 A2	3/2002	WIPO	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>EW</i>	17.	EP 0999717 A2	5/2000	EPO	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No
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	19.				<input type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No
	20.				<input type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No
	21.				<input type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No

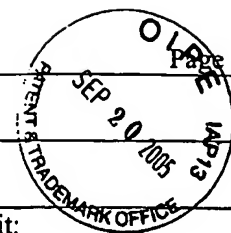
Examiner

*Esa W Abraham*

Date Considered

*05/08/04*

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 Include copy of this form with next communication to Applicant.



<b>FORM PTO-1449B</b>  <b>INFORMATION DISCLOSURE</b> <b>CITATION</b>	Attorney Docket: 4208-4158	Serial No.: 10/694,881
	Applicant: Arto PALIN, et al.	
	Filing Date: October 29, 2003	Group Art Unit: 2131

### NON PATENT LITERATURE DOCUMENTS

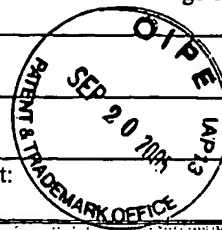
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
EB	1.	The Bluetooth Special Interest Group, Specification of The Bluetooth System, Vol. 1 & Vol. 2, Core and Profiles: Version 1.1, February 22, 2001.
EB	2.	O'Donnell et al., "An Integrated, Low Power, Ultra-Wideband Transceiver Architecture for Low-Rate, Indoor Wireless Systems", Dept. of Electrical Engineering & Computer Science, University of California, Berkeley, Berkeley, CA, 8 pgs.
EB	3.	P. I. I. Withington, et al., "An Impulse Radio Communication System", "Proceedings of the International Conference on Ultra-Wideband, Short Pulse Electromagnetics", (ISBN 0-306-44530-1), October 19, 1992, pgs. 113-200.
EB	4.	J. Bray and C. Sterman, "Bluetooth 1.1-Connect Without Cables", Prentice Hall Inc., Upper Saddle River, NJ 1002 (ISBN 0-13-066106-6), Sects. 5.4., pgs. 70-78
EB	5.	D. J. Costello, Jr., et al., "Applications of Error-Control Coding", IEEE Transactions of Information Theory, October 1998, Vol. 44, pp. 2531-2560
EB	6.	Walter Hirt, "Ultra-wideband radio technology: overview and future research", COMPUTER COMMUNICATIONS, Amsterdam, NL, vol. 26, no. 1, February 2003, pp. 46-52
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Examiner Signature	<i>Ethan Asarch</i>	Date Considered	05/08/06
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

<b>FORM PTO-1449A</b>  <b>INFORMATION DISCLOSURE CITATION</b>	Attorney Docket: 4208-4158	Serial No.: 10/694,881
	Applicant: Arto PALIN, et al.	
	Filing Date: October 29 2003	Group Art Unit: 2131



### U.S. PATENT / PUBLICATION DOCUMENTS

Examiner Initial		Patent/Publication Number	Publication/Issue Date	Name	Filing Date
EA	1.	5,677,927	10/14/1997	Fullerton et al.	
EA	2.	5,687,169	11/11/1997	Fullerton	
EA	3.	6,549,567 B1	04/15/2003	Fullerton	
EA	4.	6,571,089 B1	05/27/2003	Richards et al.	
EA	5.	6,587,949 B1	07/01/2003	Steinberg	
EA	6.	2003/0063196 A1	04/03/2003	Palatov et al.	
EA	7.	2001/0055356 A1	12/27/01	Davies	
EA	8.	2001/0049262 A1	12/06/2001	Lehtonen	
EA	9.	2002/0073269 A1	06/13/2002	Kawashima et al.	
EA	10.	2002/0080866	6/27/2002	Bouet, et al.	
EA	11.	2003/0100288 A1	5/29/2003	Tomlinson, Jr., et al.	
EA	12.	2003/0137966 A1	7/24/2003	Odman, et al.	
EA	13.	2003/0148767 A1	8/7/2003	Sugaya, et al.	
EA	14.	2003/0032422 A1	2/13/2003	Wynbeek	
EA	15.	2003/0078037 A1	4/24/03	Auckland, et al.	

### FOREIGN PATENT DOCUMENTS

Examiner Initial		Patent Number	Publication Date	Country	Copy Filed	Translation
EA	16.	1 185 033 A1	3/6/02	EP	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No
EA	17.	2 287 383	9/13/95	GB	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No
	18.				<input type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No
	19.				<input type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No
	20.				<input type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No

Examiner <i>Eisaw Abraham</i>	Date Considered <i>05/08/06</i>
<b>EXAMINER:</b> Initial if reference considered, whether or not citation is in conformance with MPEP §609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.	